

ABSTRACT

A one-piece, transparent flexible ear coupler for use with hearing evaluation is disclosed. It includes an annular side wall and a bottom wall forming an acoustic chamber. A flexible adhesive-backed flange is disposed on the periphery of the ear coupler. The flange attaches to the subject's head, firmly holding the ear coupler in place over the ear. The annular side wall has a port for the placement of a transducer assembly, and also has ribs to help lock the transducer assembly in place. The transducer assembly can be placed in an up or down position, and can be switched between positions while the coupler is attached to the subject's head. The ear coupler advantageously conforms to the subject's head, thereby minimizing the likelihood that the ear coupler will become detached during testing. The coupler can be inexpensively manufactured, since its one-piece design allows the use of relatively low-cost processes such as injection molding and thermoforming.